

IN THE CLAIMS

This listing of claims replaces all prior listings and versions of the claims in the present application.

Listing of Claims:

Claim 1 (Currently Amended): An exhaust emission control device with a post-processing device for allowing exhaust gas to pass therethrough for gas purification incorporated in an exhaust pipe of an internal combustion engine, comprising a plasma generator arranged upstream of the post-processing device for discharging electricity into the exhaust gas to generate plasma, flow-through type oxidation catalyst arranged upstream of the plasma generator, fuel adding means arranged upstream of the oxidation catalyst configured for adding fuel in the exhaust gas and temperature increasing means configured for increasing exhaust temperature to a level enough for oxidation reaction on the oxidation catalyst of the fuel added by the fuel adding means; and

a temperature sensor arranged between the oxidation catalyst and the plasma generator for detecting exhaust temperature, fuel being added properly by the fuel adding means only on a condition that a detected value of the temperature sensor exceeds a predetermined threshold, the temperature of the exhaust gas being increased by the temperature increasing means before the fuel addition by the fuel adding means on a condition that the detected vale of the temperature sensor is below the predetermined threshold.

Claim 2 (Canceled).

Claim 3 (Original): The exhaust emission control device according to claim 1, wherein fuel adding means is fuel injection control means which causes the fuel injection unit

to conduct post-injection followed by the main injection and with non-ignition timing later than a compressive top dead center.

Claim 4 (Currently Amended): The exhaust emission control device according to claim [[2]] 1, wherein fuel adding means is fuel injection control means which causes the fuel injection unit to conduct post-injection followed by the main injection and with non-ignition timing later than a compressive top dead center.

Claim 5 (Currently Amended): The exhaust emission control device according to claim 1, wherein the temperature increasing means for increasing the exhaust temperature [[is]] comprises suction throttling means for properly throttling suction flow rate.

Claim 6 (Currently Amended): The exhaust emission control device according to claim [[2]] 1, wherein the temperature increasing means for increasing the exhaust temperature [[is]] comprises suction throttling means for properly throttling suction flow rate.

Claim 7 (Currently Amended): The exhaust emission control device according to claim 3, wherein the temperature increasing means for increasing the exhaust temperature [[is]] comprises suction throttling means configured for properly throttling suction flow rate.

Claim 8 (Currently Amended): The exhaust emission control device according to claim 4, wherein the temperature increasing means for increasing the exhaust temperature [[is]] comprises suction throttling means configured for properly throttling suction flow rate.

Claim 9 (Currently Amended): The exhaust emission control device according to claim 1, wherein the temperature increasing means for increasing the exhaust temperature is fuel injection controlling means configured for causing the fuel injection unit to conduct main injection delayed within a combustible range to the normal injection.

Claim 10 (Currently Amended): The exhaust emission control device according to claim [[2]] 1, wherein the temperature increasing means for increasing the exhaust temperature is fuel injection controlling means configured for causing the fuel injection unit to conduct main injection delayed within a combustible range to the normal injection.

Claim 11 (Currently Amended): The exhaust emission control device according to claim 3, wherein the temperature increasing means for increasing the exhaust temperature [[is]] comprises fuel injection controlling means configured for causing the fuel injection unit to conduct main injection delayed within a combustible range to the normal injection.

Claim 12 (Currently Amended): The exhaust emission control device according to claim 4, wherein the temperature increasing means for increasing the exhaust temperature [[is]] comprises fuel injection controlling means configured for causing the fuel injection unit to conduct main injection delayed within a combustible range to the normal injection.

Claim 13 (Currently Amended): The exhaust emission control device according to claim 1, wherein the temperature increasing means for increasing the exhaust temperature [[is]] comprises fuel injection controlling means configured for causing the fuel injection unit to conduct post injection with a combustible timing just after the main injection.

Claim 14 (Currently Amended): The exhaust emission control device according to claim [[2]] 1, wherein the temperature increasing means for increasing the exhaust temperature [[is]] comprises fuel injection controlling means configured for causing the fuel injection unit to conduct post injection with a combustible timing just after the main injection.

Claim 15 (Currently Amended): The exhaust emission control device according to claim 3, wherein the temperature increasing means for increasing the exhaust temperature [[is]] comprises fuel injection controlling means configured for causing the fuel injection unit to conduct post injection with a combustible timing just after the main injection.

Claim 16 (Currently Amended): The exhaust emission control device according to claim 4, wherein the temperature increasing means for increasing the exhaust temperature [[is]] comprises fuel injection controlling means configured for causing the fuel injection unit to conduct post injection with a combustible timing just after the main injection.

Claim 17 (Currently Amended): The exhaust emission control device according to claim 1, further comprising judging means configured for determining whether fuel addition is required or not through monitoring at least either of current and voltage upon generation of plasma in the plasma generator.

Claim 18 (Currently Amended): The exhaust emission control device according to claim [[2]] 1, further comprising judging means configured for determining whether fuel addition is required or not through monitoring at least either of current and voltage upon generation of plasma in the plasma generator.

Claim 19 (Currently Amended): The exhaust emission control device according to claim 3, further comprising judging means configured for determining whether fuel addition is required or not through monitoring at least either of current and voltage upon generation of plasma in the plasma generator.

Claim 20 (Currently Amended): The exhaust emission control device according to claim 4, further comprising judging means configured for determining whether fuel addition is required or not through monitoring at least either of current and voltage upon generation of plasma in the plasma generator.

Claim 21 (Currently Amended): The exhaust emission control device according to claim 5, further comprising judging means configured for determining whether fuel addition is required or not through monitoring at least either of current and voltage upon generation of plasma in the plasma generator.

Claim 22 (Currently Amended): The exhaust emission control device according to claim 6, further comprising judging means configured for determining whether fuel addition is required or not through monitoring at least either of current and voltage upon generation of plasma in the plasma generator.

Claim 23 (Currently Amended): The exhaust emission control device according to claim 7, further comprising judging means configured for determining whether fuel addition is required or not through monitoring at least either of current and voltage upon generation of plasma in the plasma generator.

Claim 24 (Currently Amended): The exhaust emission control device according to claim 8, further comprising judging means configured for determining whether fuel addition is required or not through monitoring at least either of current and voltage upon generation of plasma in the plasma generator.

Claim 25 (Currently Amended): The exhaust emission control device according to claim 9, further comprising judging means configured for determining whether fuel addition is required or not through monitoring at least either of current and voltage upon generation of plasma in the plasma generator.

Claim 26 (Currently Amended): The exhaust emission control device according to claim 10, further comprising judging means configured for determining whether fuel addition is required or not through monitoring at least either of current and voltage upon generation of plasma in the plasma generator.

Claim 27 (Currently Amended): The exhaust emission control device according to claim 11, further comprising judging means configured for determining whether fuel addition is required or not through monitoring at least either of current and voltage upon generation of plasma in the plasma generator.

Claim 28 (Currently Amended): The exhaust emission control device according to claim 12, further comprising judging means configured for determining whether fuel addition is required or not through monitoring at least either of current and voltage upon generation of plasma in the plasma generator.

Claim 29 (Currently Amended): The exhaust emission control device according to claim 13, further comprising judging means configured for determining whether fuel addition is required or not through monitoring at least either of current and voltage upon generation of plasma in the plasma generator.

Claim 30 (Currently Amended): The exhaust emission control device according to claim 14, further comprising judging means configured for determining whether fuel addition is required or not through monitoring at least either of current and voltage upon generation of plasma in the plasma generator.

Claim 31 (Currently Amended): The exhaust emission control device according to claim 15, further comprising judging means configured for determining whether fuel addition is required or not through monitoring at least either of current and voltage upon generation of plasma in the plasma generator.

Claim 32 (Currently Amended): The exhaust emission control device according to claim 16, further comprising judging means configured for determining whether fuel addition is required or not through monitoring at least either of current and voltage upon generation of plasma in the plasma generator.

Claims 33-35 (Canceled).